



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

me

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

08/841,397 04/30/97 MATSUOKA S 15-4-499.00

JOHN C PHILLIPS
FISH & RICHARDSON PC
601 13TH STREET NW
WASHINGTON DC 20005

LM02/0707

EXAMINER

DINH, K

ART UNIT	PAPER NUMBER
----------	--------------

2758

9

DATE MAILED:

07/07/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/841,397

Applicant(s)

MATSUOKA

Examiner

Khanh Dinh

Group Art Unit

2758

☒ Responsive to communication(s) filed on 4/9/1999☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1,3-9,11-18,20-44 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1,3-6,9,11-16,18-23,26-44 is/are rejected.

☒ Claim(s) 7,8,17,24 and 25 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2758

DETAILED ACTION

1. This is in response to the amendment filed on 2/25/1999. Claims 1, 3-9, 11-18, 20-25 and new claims 26-44 are presented for examination. Claims 2, 10 and 19 are canceled.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

3. Claims 1, 3, 4, 5, 9, 11-13, 18, 20-22, 26-30, 32-37 and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruno et al U.S. pat. No. 5,710,591 and Braun U.S pat. No. 4,360,827 and in view of Everett U.S. pat. No.5,864,816.

Art Unit: 2758

As to claim 1, Bruno discloses an audio conference server (ACS) for enabling an application program to provide multi-point, weight controllable audio conferencing comprising:

- means for managing at least one audio conference, said at least one audio conference comprising a plurality of audio clients (see 26 fig.1)
- means for receiving audio data from said plurality of audio clients (see fig.1 and col.1 lines 29-51).

Bruno does not specifically disclose the mixer for audio data. Braun discloses means for mixing said audio data to provide spatialized audio to said plurality of audio clients in said at least one audio conference, wherein said fixing means results in mixed audio data (see abstract and col.4 lines 12-41 and fig.3); and means for delivering said mixed audio data to said plurality of audio clients in said at least one audio conference (see col.6 line 59-col.7 line 23). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Braun's audio data mixer in Bruno's audio conference server because it would have enabled an audio server to return an audio signal to the broadcast site (see Braun's abstract and col.4 line 56 - col.5 line 16).

Neither Bruno nor Braun discloses a mixing means for providing distance-based attenuation according to sound decay characteristics. However, Everett discloses providing distance-based attenuation according to sound decay characteristics (i.e.,

Art Unit: 2758

depend on the position of the user) (see Everett's abstract, fig.4, col.2 lines 23-51 and col.5 line 61 to col.6 line 37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Everett's teaching into Bruno's ACS because it would have reduced the perceived loudness of noise and the background noise for the attenuation and mixing audio signals.

As to claim 3, Bruno teaches checking the status of a registered owner of said at least one audio conference to determine whether said at least one audio conference still exists (see abstract and col.12 lines 20-52).

As to claim 4, Bruno further discloses checking means including a resource audit service, said resource audit service operable when said at least one audio conference is generated by a first application and is being used by a second application (see abstract and col. 4 line 54- col.5 line 40).

As to claim 5, Bruno further discloses a plurality of audio clients includes set top box (STB) audio clients and point source audio (PSA) audio clients (see col.7 lines 27-64).

Claims 9 and 18 are rejected for the same reasons set forth above for claim 1.

Claim 11 is rejected for the same reasons set forth above for claim 3.

Art Unit: 2758

Claims 13 and 22 are rejected for the same reasons set forth above for claim 5.

Claims 12 and 21 are rejected for the same reasons set forth above for claim 4.

Claim 20 is rejected for the same reasons set forth above for claim 3.

Claim 26 is rejected under the same reasons set forth in claim 1 with the combination of Braun, Bruno and Everret.

As to claim 27, Bruno further discloses the target audio client is the same as the source audio client (see fig.1 and col.4 line 54 to col.5 line 40 and col.6 lines 13-46).

Claim 28 is rejected under the same reasons set forth in claim 27.

Claim 29 is rejected under the same reasons set forth in claim 1.

As to claim 30, Bruno further discloses the source and target audio clients are displayed as points as a viewing screen from which sound appears emanate (i.e., to come out from a source) (see col.3 lines 19-50).

Claims 32, 33 and 35 are rejected for the same reasons set forth in claim 5.

As to claim 34, Bruno further discloses STB including a set-top application for controlling audio data from a microphone or speaker (see Bruno's summary, col.4 line 54 to col.5 line 32).

Art Unit: 2758

Claim 36 is rejected for the same reasons set forth in claim 34.

Claim 37 is rejected for the same reasons set forth in claim 1.

As to claim 39, Everett further discloses the step of identifying a decay factor (i.e., scale-factor) for each audio client (see col.5 lines 1-36).

Claim 40 is rejected for the same reasons set forth in claim 39.

As to claim 41, Everett further discloses determining a weighted value between the source audio client and the target audio client based on the source audio client's decay factor (see Everett's col.5 line 36 to col.6 line 5).

Claim 42 is rejected for the same reasons set forth in claim 41.

As to claim 43, Everett further discloses refining the mix for the audio clients by adjusting a plurality of audio data functions such as gain control, fade in/fade out, floating point operation elimination, mixing adaption, mixing cut off, and stream audio (see Everett's fig.3 col.5 lines 1-60).

Claim 44 is rejected for the same reasons set forth in claim 26.

Art Unit: 2758

4. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruno, Braun and Everett as in claims 1 and 26 above and further in view of Stanley et al U.S. pat. No.4,691,347.

Bruno, Braun and Everett's teachings still applied as in claim one above. Neither Bruno nor Braun nor Everett discloses the step of adding or removing conference participants in an Audio Conference Server. However, Stanley discloses the step of adding or removing conference participants in an Audio Conference Server (see col.10 lines 38-53 and col.15 lines 1 to col.16 line 60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Stanley's teachings into Braun's Audio Conference System because it would have allowed the operator to monitor the Audio Conference more effectively.

The rest of the claim is taught by Everett (see fig.4 and col.5 line 61 to col.6 line 27).

5. Claims 6, 14-16, 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun and Bruno as applied to claims 1 and 26 above, and further in view of Chau et al U. S. Pat. No.5,764,750.

As to claim 6, Braun and Bruno's teachings still applied as in item 2 above, but neither Braun nor Bruno discloses a providing program access to high level methods for creating and managing a proxy audio conference. However, Chau discloses a providing program access to high level methods for creating and managing a proxy audio conference (see abstract, fig.2 and col.5 lines 1-col.6 lines 35). It would have

Art Unit: 2758

been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Chau's proxy server in Braun's audio conference server because it would have provided the capabilities required of endpoints by the local system and its protocol in order to allow the local and the remote endpoints to communicate with each other (see Chau's summary).

Claims 14-16, 23, 31 are rejected for the same reasons set forth above for claim 6.

Response to Argument

6. Applicant's response with respect to claims 1, 3-6, 9, 11-16, 18, 20-23 and 26-46 have been fully considered but they are **not** deemed to be persuasive:

A. The applicant asserted the neither Bruno nor Braun nor Helf discloses mixing means providing distance-based attenuation according to sound decay characteristics.

Everett explicitly discloses said mixing means providing distance-based attenuation according to sound decay characteristics (see fig.3, fig.4 and col.5 line 61 to col. 6 line 27) as discussed above.

Art Unit: 2758

Conclusion

7. Claims 1, 3-6, 9, 11-16, 18, 20-23 and 26-46 are **rejected**.
8. Claims 7, 8, 17, 24 and 25 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (703) 308-

Art Unit: 2758


8528. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for this group is (703) 305-7201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

K.D

Khanh Dinh
Patent Examiner
Art Unit 2758
6/25/1999


AHMAD F. MATAR
PRIMARY EXAMINER
GROUP 2700